



**Professor Aldo Steinfeld**

«I encourage my students to be creative, think critically, and carry out independent research.»

# Professorship of Renewable Energy Carriers

## Institute of Energy Technology

We seek to advance the thermal and chemical engineering sciences applied to renewable energy. Our unique solar concentrating platforms allow us to pursue highly innovative projects aimed at developing sustainable and efficient solar energy technologies. The lab offers state-of-the-art experimental laboratories and advanced courses in fundamental and applied thermal sciences.

### Focus

- High-temperature heat/mass transport phenomena
- Multi-phase reacting flows and thermochemical processing
- Applications in solar power, fuels, and materials production
- Applications in CO<sub>2</sub> capture and recycling, and energy storage

### Tools and methods

Thermodynamic and kinetic analyses, computational fluid dynamics and heat transfer modelling, materials development and characterization, high-flux solar optics, engineering design, fabrication, testing, optimization, and scale-up of efficient thermal converters and chemical reactors

Further details online:  
[www.prec.ethz.ch](http://www.prec.ethz.ch)

